



9200/12816

**UNITED STATES PATENT AND TRADEMARK OFFICE**

Examiner:

Atty Docket No.: 1047

**BOX DAC**

In re:

Applicant: BERNHARD LUCAS

Serial No.: 09/488,398

Filed: January 20, 2000

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

On

9/13/01

**PETITION TO WITHDRAW HOLDING OF ABANDONMENT**

August 16, 2001

Honorable Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

The subject application became abandoned for failure to reply to the Notice to File Missing Parts mailed on March 21, 2000.

Applicant herewith states that it did not receive a Notice to File Missing Parts mailed on March 21, 2000 or on any other day.

In fact, on November 7, 2000, applicant caused to be filed a status request indicating that applicant had not yet received a Notice to File Missing Parts.

The undersigned herewith states that he has carefully reviewed the file of the subject application and there is no indication therein that a Notice to File Missing Parts was ever received.

Applicant further submits herewith the appropriate pages from the Office

Docket book upon which the term for responding to the Notice to File Missing Parts would have been indicated had the Notice to File Missing Parts been received.

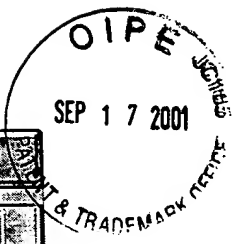
Applicant further submits herewith a declaration in response to the requirement to file a Notice of Missing Parts and requests that any fee be debited to the account of the undersigned, #19-4675.

Withdrawal of the Notice of Abandonment of the subject application is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Michael J. Striker', is written over the printed name.

Michael J. Striker  
Attorney for Applicant  
Reg. No.: 27233  
103 East Neck Road  
Huntington, New York 11743



Clear	Copy	Search	Save	Print	Delete	Undo	Exit
Case Number:		1047		Country:		US	
		SubCase:					
Client:				ROBERT BOSCH GMBH			
				United States of America			
Case Type:		ORD		Status:		Pending	
Application Number:		09/488,398		Filing Date:		20-Jan-2000	
Patent Number:				Issue Date:			
Publication Number:				Publication Date:			
Tax Schedule:		LE		Expiration Date:			
Agent:				Agent Reference #:			
Press PGDN to Edit/View Actions and Remarks							

8 Action(s) Due		Due Date	Indicator	Action Taken
Mail by date	21-Jan-2000	Due Date	17-Jan-2000	<input type="checkbox"/>
Priority	21-Jan-2000	Due Date	20-Jan-2000	<input type="checkbox"/>
Information Disclosure Stmt	20-Apr-2000	Due Date		<input type="checkbox"/>
Foreign Filing Reminder	20-Jul-2000	Due Date		<input type="checkbox"/>
Filing IDS	08-Nov-2000	Due Date	08-Nov-2000	<input type="checkbox"/>
Foreign Filing Due	20-Jan-2001	Final		<input type="checkbox"/>
Application Sta Follow Up Date	08-May-2001	Due Date		<input type="checkbox"/>
Application Status Check	20-Jul-2001	Due Date	08-Nov-2000	<input type="checkbox"/>

Remarks:

Case Number: 1047    US

User ID: MICHAEL S    Date Created: 03-Jan-2000    Last Update: 28-Mar-2000

2000 141st day - 225 days follow  
Armed Forces Day (US)

SATURDAY

20

MAY

SEP 17 2001

Patent & Trademark Office  
JC185

~~Ragaly 05/25/00, 3/15 Text May 21~~  
~~Altler 677, 600 Text May 21~~  
~~Kotlarski 202, 653 Text May 21~~  
~~Opposition Bottger answer May 21~~  
~~discovery ex req filed 5/18/00~~

MAY

21

SUNDAY

2000 1st day - 224 days follow

SEP 17 2001

PATENT & TRADEMARK

4/28/00

~~Mayer 09/266,989 FF~~

~~May 22~~

4/28/00

~~Henderich 08/983,594 FF~~

~~May 22~~

4/28/00

~~Scholz 09/051,331 FF~~

~~May 22~~

see 6/21/00

~~Lalonde 09/331,879 OA~~

~~May 22~~

CPTA 4/14/00

~~Zabler 08/806,256 FF~~

~~May 22~~



## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
09/488,398	01/20/2000	Bernhard Lucas	1047

Striker Striker & Stenby  
103 East Neck Road  
Huntington, NY 11743



CONFIRMATION NO. 4407  
ABANDONMENT/TERMINATION  
LETTER



\*OC000000006362631\*

Date Mailed: 07/31/2001

### NOTICE OF ABANDONMENT UNDER 37 CFR 1.53 (f) OR (g)

The above-identified application is abandoned for failure to timely or properly reply to the Notice to File Missing Parts (Notice) mailed on 03/21/2000.

- No reply was received.

A petition to the Commissioner under 37 CFR 1.137 may be filed requesting that the application be revived.

Under 37 CFR 1.137(a), a petition requesting the application be revived on the grounds of **UNAVOIDABLE DELAY** must be filed promptly after the applicant becomes aware of the abandonment and such petition must be accompanied by: (1) an adequate showing of the cause of unavoidable delay; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(l); and (4) a terminal disclaimer if required by 37 CFR 1.137(c).

Under 37 CFR 1.137(b), a petition requesting the application be revived on the grounds of **UNINTENTIONAL DELAY** must be filed promptly after applicant becomes aware of the abandonment and such petition must be accompanied by: (1) a statement that the entire delay was unintentional; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(m); and (4) a terminal disclaimer if required by 37 CFR 1.137(c).

Any questions concerning petitions to revive should be directed to "Office of Petitions" at (703) 305-9282.

*A copy of this notice **MUST** be returned with the reply.*

Customer Service Center  
Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY



35207

**BE IT KNOWN** that **WE**, Bernhard LUCAS, Frank SCHATZ, Juergen SEIZ, Heinz EISENSCHMID, Andreas KUGLER and Achim DIETERICH, citizens of Germany, whose post office addresses and residencies are, respectively, Zehenderstrasse 2, 74354 Besigheim, Germany; Tellstrasse 29, 70806 Kornwestheim, Germany; Baumblyete 11, 73642 Welzheim, Germany; Ludwigshafener Strasse 7, 70499 Stuttgart, Germany; Teckstrasse 13, 73553 Alfdorf, Germany; and Spielhof 25, 71540 Murrhardt, Germany; have invented a certain new and useful

**CIRCUIT DEVICE WITH A CONTACT ELEMENT FOR ELECTRICALLY  
CONNECTING A WAVE GUIDE AND A CONDUCTOR STRIP  
IN A NEARLY STRESS-FREE MANNER**

of which the following is a complete specification thereof:



## **BACKGROUND OF THE INVENTION**

### **1. Field of the Invention**

5       The present invention relates to a circuit device with a contact element for electrically connecting a wave guide to a conductor strip.

### **2. Prior Art**

10       A so-called stepping transformer, whose geometry is substantially determined by the wavelength of the frequencies used, is employed in high frequency circuitry in a frequency range over 50 GHz at the junction between a wave guide and conductor strip circuit elements.

      Usually an electrical connection of the final stage of the stepping  
15   transformer to the conductor strip circuit device is required. This electrical connection is, for example, accomplished by glued conducting small gold bands. These small gold bands are either mounted over a corner or on the bottom side of the final stage. This fabrication method is very expensive. Furthermore the electrical connection is put under great mechanical stress by possible relative  
20   motion due to differing thermal expansion of the metallic wave guide and the dielectric conductor strip substrates.

## Summary of the Invention

It is an object of the present invention to provide a circuit device with a  
5 contact element for electrically connecting the wave guide to a conductor strip,  
which does not have the above-mentioned disadvantage.

According to the invention the contact element electrically connects the  
wave guide with the conductor strip by means of two contacting areas and is  
made from an accurately prefabricated coil spring having predetermined  
10 reproducible properties. This coil spring is connected at one of the contacting  
areas to the conductor strip or to the wave guide by means of an electrically  
conductive glue and another of the contacting areas is a sliding contact whereby  
the coil spring is pre-tensioned; or is provided by an electrically conductive glue  
or adhesive portion, whereby the coil spring is bent into a U-shape; or is provided  
15 with a highly flexible electrically conductive adhesive section.

This type of electrical connection is easy to make. Different thermal  
expansion properties of the different materials are easily and satisfactorily  
compensated.

Advantageous additional embodiments are set forth in the dependent  
20 claims. Their features, in so far as it is appropriate and significant, may of course  
be combined with each other.

The sliding contact can move with the participating structural elements  
without experiencing significant mechanical stresses due to relative motions

(originating , for example, from differing thermal expansion properties). Without the device according to the invention the contacting areas would be subjected to impermissibly large mechanical stresses. The motion is compensated by the coil spring itself and/or by the pre-tensioned sliding contact in a nearly stress-free manner.

Relative motion of the parts occurs without tearing off the contact element. The contact junction is reproducible and not dependent on the bonding form and processes. Thus the electrical tuning between the wave guide and the conductor strip is reproducible.

The coil spring for applications in the highest frequency engineering is especially small (length, about 100 to 200  $\mu\text{m}$ , thickness about 50  $\mu\text{m}$ ). The coil spring is formed with very great accuracy, particularly as a so-called MIGA coil spring(MIGA = microgalvanic). UV depth lithography or comparable methods of structuring polymers in combination with multilayer microgalvanic methods are suitable for making the coil spring. Laser processing or high precision punching or stamping can be suitable for making the coil spring.

Thus simple but precise or exact fabrication methods are possible for the coil spring. Tolerances of  $< \pm 10 \mu\text{m}$  may be obtained for the above-described contact element with UV depth lithography. A wide range of materials can be selected so that special spring properties can be obtained. An automatic mounting of the coil spring and easy manufacture of the electrical connection are possible. Several coil springs can be economically made at the same time in a batch process (which means for many applications).

## Brief Description of the Drawing

The objects, features and advantages of the invention will now be  
5 illustrated in more detail with the aid of the following description of the preferred  
embodiments, with reference to the accompanying figures in which:

Figure 1 is a schematic cutaway cross-sectional view through a first  
embodiment of a circuit device with a contact element for connecting a wave  
guide to a conductor strip;

10 Figure 2 is a schematic cutaway cross-sectional view through a second  
embodiment of a circuit device with a contact element for connecting a wave  
guide to a conductor strip;

Figure 3 is a schematic cutaway cross-sectional view through a third  
embodiment of a circuit device with a contact element for connecting a wave  
15 guide to a conductor strip;

Figure 4 is a schematic cutaway cross-sectional view through a fourth  
embodiment of a circuit device with a contact element for connecting a wave  
guide to a conductor strip; and

Figure 5 is a schematic cutaway cross-sectional view through a fifth  
20 embodiment of a circuit device with a contact element for connecting a wave  
guide to a conductor strip.

## Description of the Preferred Embodiments

A wave guide 1 in the form of a stepping transformer and a conductor strip substrate 2 rest on a metal plate 5. The wave guide is screwed on the metal plate 5. The form of the stepping transformer is not described here in detail. The conductor strip substrate 2 is glued on with the help of an electrically conductive adhesive material or glue 6. The conductor strip substrate 2 is provided on its upper side with a conductor strip 7. This conductor strip is a component of a microwave IC (MIC). The wave guide 1 has a coupling opening 8 in the vicinity of the conductor strip.

According to figure 1 a coil spring 11 operating as an electrically conductive contact element is bonded to the conductor strip 7 at a first contacting area 9 with an electrically conducting glue or adhesive . Silver-filled epoxy resin glue is suitable as the adhesive material. The wave guide 1 is assembled after the coil spring 11 has been bonded with the adhesive, so that the mechanically pre-tensioned coil spring 11, which forms a sliding contact 10 at a second contacting area 9', presses resiliently against a surface 1a of the wave guide 1, which extends substantially perpendicularly to the plane of the conductor strip 7. The contact element forms a low impedance contact between the wave guide 1 and the conductor strip 7. This low impedance connection is required in order to permit an optimum tuning of the coupling of the electromagnetic waves from the

wave guide 1 into the conductor strip 7. Besides the geometry of the junction plays an important roll.

Relative motions, especially thermally dependent relative motions, between the wave guide 1 and the conductor strip 7 are compensated with the help of the sliding contact 10 and the spring force of the coil spring 11. Without this device the contacting areas would be subjected to impermissibly large mechanical stresses.

Figure 2 illustrates another embodiment for the coil spring 12. This embodiment is similar to the embodiment shown in Fig. 1, but differs from it because the surface 1b of the wave guide 1 on which the coil spring 12 bears is substantially parallel to the conductor strip 7.

This latter situation in regard to Fig. 2 is also true of the third embodiment shown in Fig. 3. In the embodiment shown in Fig. 3 a sliding contact 10 of a coil spring 13 is located in a cavity 1c of the wave guide 1. It is also possible to additionally secure the spring contact in the cavity with a highly flexible electrically conductive glue or adhesive material.

In the embodiment shown in Fig. 4 a coil spring 14 is electrically conductively glued to the wave guide 1, while the sliding contact 10 makes electrical contact on the conductor strip 7 on the other conducting area 9'.

In Figure 5 in a fifth embodiment the coil spring 15 has a curved U-shape. The coil spring 15 is glued in an electrically conductive manner to a first contacting area 9 on the conductor strip 7. The other contacting area 9' of the coil spring 15 is formed as an electrically conducting adhesive area 16. This adhesive

area 16 can however be highly flexible. The coil spring 15 needed not then be formed so that it is U-shaped.

The disclosure in German Patent Application 199 02 240.2 of January 21, 1999 is incorporated here by reference. This German Patent Application  
5 describes the invention described hereinabove and claimed in the claims appended hereinbelow and provides the basis for a claim of priority for the instant invention under 35 U.S.C. 119.

While the invention has been illustrated and described as embodied in a circuit device with a contact element for electrically connecting a wave guide and  
10 a conductor strip in a nearly stress-free manner, it is not intended to be limited to the details shown, since various modifications and changes may be made without departing in any way from the spirit of the present invention.

Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it  
15 for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention.

What is claimed is new and is set forth in the following appended claims.

**We claim:**

- 1 1. A circuit device with a contact element that electrically connects a wave guide  
2 (1) with a conductor strip (7) by means of two contacting areas (9,9'),  
3 wherein the contact element consists of a prefabricated coil spring (11 to  
4 15) having reproducible spring properties, is bonded at one (9) of the contacting  
5 areas to the wave guide (1) or the conductor strip (7) by means of an electrically  
6 conductive glue or adhesive, and  
7 wherein another (9') of the contacting areas is a sliding contact (10),  
8 whereby the coil spring is pre-tensioned; or is provided by an electrically  
9 conductive glue or adhesive portion (16), whereby the coil spring (15) is bent into  
10 a U-shape; or is provided with a highly flexible electrically conductive adhesive  
11 section (16).
- 1 2. The circuit device as defined in claim 1, wherein said coil spring (11 to 15) is  
2 made by means of UV depth lithography and multilayer galvanic methods.
- 1 3. The circuit device as defined in claim 1, wherein said coil spring (11 to 15) is  
2 made by laser processing.
- 1 4. The circuit device as defined in claim 1, wherein said coil spring (11 to 15) is  
2 made by high precision stamping or punching.



1 5. The circuit device as defined in claim 1, wherein said coil spring (11 to 15) is  
2 made by means of a batch process.

1 6. The circuit device as defined in claim 1, wherein said wave guide is a stepping  
2 transformer.

1 7. The circuit device as defined in claim 1, further comprising a conductor strip  
2 substrate (2) and wherein said conductor strip (7) is mounted on said conductor  
3 strip substrate (2).

1 8. The circuit device as defined in claim 1, wherein both surfaces (1a,7) of the  
2 wave guide (1) and the conductor strip (7) contacting the contact element are  
3 substantially perpendicular to each other.

1 9. The circuit device as defined in claim 1, wherein both surfaces (1a,7) of the  
2 wave guide (1) and the conductor strip (7) contacting the contact element are  
3 substantially parallel to each other.



## ABSTRACT OF THE DISCLOSURE

The circuit device has a contact element which electrically connects a wave guide (1) with a conductor strip (2) by means of two contacting areas. To avoid mechanical stresses due to thermal expansion the contact element is formed as a precisely prefabricated coil spring having reproducible properties, which is connected at one of the contacting areas to the wave guide (1) or the conductor strip (2) by means of an electrically conducting adhesive or glue, while the second contacting area is provided as a sliding contact, whereby the coil spring is pre-stressed.



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## Declaration and Power of Attorney for Patent Application Erklärung für Patentanmeldungen mit Vollmacht

### German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides  
Statt:

Bernhard LUCAS  
Frank SCHATZ  
Juergen SEIZ  
Heinz EISENSCHMID  
Andreas KUGLER  
Achim DIETERICH

dass mein Wohnsitz, meine Postanschrift und meine  
Staatsangehörigkeit den im nachstehenden nach meinem Namen  
aufgeführten Angaben entsprechen, dass ich nach bestem Wissen der  
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Name angegeben ist) oder ein ursprünglicher, erster und  
Miterfinder (falls nachstehend mehrere Namen aufgeführt sind) des  
Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein  
Patent für die Erfindung mit folgendem Titel beantragt  
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#### SCHALTUNGSANORDNUNG

deren Beschreibung hier beigelegt ist, es sei denn (in diesem Falle  
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- ☐ wurde angemeldet am \_\_\_\_\_  
unter der US-Anmeldenummer oder unter der  
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Vertrags über die Zusammenarbeit auf dem Gebiet des  
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\_\_\_\_\_ und am \_\_\_\_\_  
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Ich bestätige hiermit, dass ich den Inhalt der oben angegebenen  
Patentanmeldung, einschliesslich der Ansprüche, die eventuell durch  
einen oben erwähnten Zusatzantrag abgeändert wurde, durchgesehen  
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Ich erkenne meine Pflicht zur Offenbarung jeglicher  
Informationen an, die zur Prüfung der Patentfähigkeit in Einklang  
mit Titel 37, § 1.56 von Belang sind.

As a below named inventor, I hereby declare that:

Bernhard LUCAS  
Frank SCHATZ  
Juergen SEIZ  
Heinz EISENSCHMID  
Andreas KUGLER  
Achim DIETERICH

My residence, post office address and citizenship are as stated next  
to my name.

I believe I am the original, first and sole inventor (if only one name  
is listed below) or an original, first and joint inventor (if plural  
names are listed below) of the subject matter which is claimed and  
for which a patent is sought on the invention entitled

#### CIRCUIT DEVICE WITH A CONTACT ELEMENT FOR ELECTRICALLY CONNECTING A WAVE GUIDE AND A CONDUCTOR STRIP IN A NEARLY STRESS-FREE MANNER

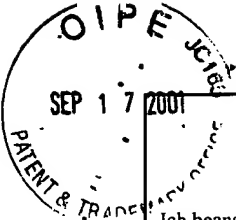
the specification of which is attached hereto unless the following box  
is checked:

- ☐ was filed on \_\_\_\_\_  
as United States Application Number or PCT  
International Application Number  
and was amended on \_\_\_\_\_  
(if applicable).

I hereby state that I have reviewed and understand the contents of the  
above identified specification, including the claims, as amended by  
any amendment referred to above.

I acknowledge the duty to disclose information which is material to  
patentability as defined in Title 37, Code of Federal Code of Federal  
Regulations, Regulations, § 1.56.

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## German Language Declaration

Ich beanspruche hiermit ausländische Prioritätsvorteile gemäss Title 35, US-Code, § 119 (a)-(d), bzw. § 365(b) aller unten aufgeführten Auslandsanmeldungen für Patente oder Erfinderurkunden, oder § 365(a) aller PCT internationalen Anmeldungen, welche wenigstens ein Land ausser den Vereinigten Staaten von Amerika benennen, und habe nachstehend durch ankreuzen sämtliche Auslandsanmeldungen für Patente bzw. Erfinderurkunden oder PCT internationale Anmeldungen angegeben, deren Anmeldetag dem der Anmeldung, für welche Priorität beansprucht wird, vorangeht.

Prior Foreign Applications  
(Frühere ausländische Anmeldungen)

1 99 02 240.2 GERMANY  
(Number) (Country)  
(Nummer) (Land)

(Number) (Country)  
(Nummer) (Land)

Ich beanspruche hiermit Prioritätsvorteile unter Title 35, US-Code, § 119(e) aller US-Hilfsanmeldungen wie unten aufgezählt.

(Application No.) (Filing Date)  
(Akzenzeichen) (Anmeldetag)

Ich beanspruche hiermit die mir unter Title 35, US-Code, § 120 zustehenden Vorteile aller unten aufgeführten US-Patentanmeldungen bzw. § 365(c) aller PCT internationalen Anmeldungen, welche die Vereinigten Staaten von Amerika benennen, und erkenne, insofern der Gegenstand eines jeden früheren Anspruchs dieser Patentanmeldung nicht in einer US-Patentanmeldung, bzw. PCT internationalen Anmeldung in in einer gemäss dem ersten Absatz von Title 35, US-Code, § 112 vorgeschriebenen Art und Weise offenbart wurde, meine Pflicht zur Offenbarung jeglicher Informationen an, die zur Prüfung der Patentfähigkeit in Einklang mit Title 37, Code of Federal Regulations, § 1.56 von Belang sind und die im Zeitraum zwischen dem Anmeldetag der früheren Patentanmeldung und dem nationalen oder im Rahmen des Vertrags über die Zusammenarbeit auf dem Gebiet des Patentwesens (PCT) gültigen internationalen Anmeldetags bekannt geworden sind.

(Application No.) (Filing Date)  
(Akzenzeichen) (Anmeldetag)

(Application No.) (Filing Date)  
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Ich erkläre hiermit, dass alle in der vorliegenden Erklärung von mir gemachten Angaben nach bestem Wissen und Gewissen der Wahrheit entsprechen, und ferner dass ich diese eidesstattliche Erklärung in Kenntnis dessen ablege, dass wissentlich und vorsätzlich falsche Angaben oder dergleichen gemäss § 1001, Title 18 des US-Code strafbar sind und mit Geldstrafe und/oder Gefängnis bestraft werden können und dass derartige wissentlich und vorsätzlich falsche Angaben die Rechtswirksamkeit der vorliegenden Patentanmeldung oder eines aufgrund deren erteilten Patentes gefährden können..

I hereby claim foreign priority under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

JANUARY 21, 1999 ☐

(Day/Month/Year Filed)  
(Tag/Monat/Jahr der Anmeldung)

(Day/Month/Year Filed)  
(Tag/Monat/Jahr der Anmeldung)

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

(Status) (patented, pending, abandoned)  
(Status) (patentiert, schwebend, aufgegeben)

(Status) (patented, pending, abandoned)  
(Status) (patentiert, schwebend, aufgegeben)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SEP 17 2001

## German Language Declaration

VERTRETUNGSVOLLMACHT: Als benannter Erfinder beauftrage ich hiermit den (die) nachstehend aufgeführten Patentanwalt (älte) und/oder Vertreter mit der Verfolgung der vorliegenden Patentanmeldung sowie mit der Abwicklung aller damit verbundenen Angelegenheiten vor dem US-Patent- und Markenamt: (Name(n) und Registrationsnummer(n) auflisten)

Michael J. Striker, Registration No. 27233  
Ilya Zborovsky, Registration No. 28563  
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Michael J. Striker  
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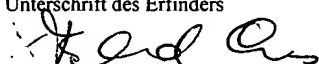

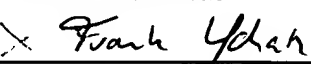
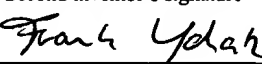
POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: (list name and registration number)

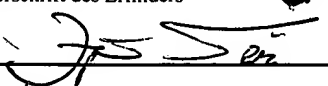
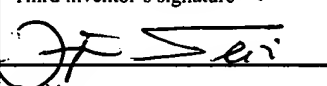
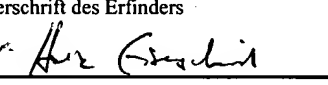
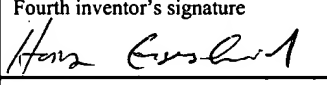

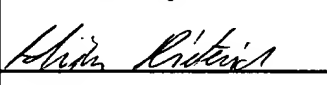
Michael J. Striker, Registration No. 27233  
Ilya Zborovsky, Registration No. 28563  
William G. Valance, Registration No.: 28275

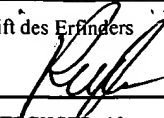
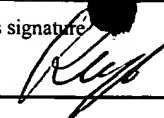
Send Correspondence to:  
STRIKER, STRIKER & STENBY  
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Michael J. Striker  
(631) 549 4700

Vor- und Zuname des einzigen oder ersten Erfinders BERNHARD LUCAS	Full name of sole or first inventor BERNHARD LUCAS
Unterschrift des Erfinders  Datum 28.1.00	Inventor's signature  Date 28.1.00
Wohnsitz ZEHENDERSTR. 2 74354 BESIGHEIM, GERMANY	Residence ZEHENDERSTR. 2 74354 BESIGHEIM, GERMANY
Staatsangehörigkeit GERMAN	Citizenship GERMAN
Postanschrift ZEHENDERSTR. 2 74354 BESIGHEIM, GERMANY	Post Office Address ZEHENDERSTR. 2 74354 BESIGHEIM, GERMANY
Vor- und Zuname des zweitens Erfinders (falls zutreffend) FRANK SCHATZ	Full name of second joint inventor, if any FRANK SCHATZ
Unterschrift des Erfinders  Datum 3.2.2000	Second inventor's signature  Date 2000/2/4
Wohnsitz TELLSTR. 29 70806 KORNWESTHEIM, GERMANY	Residence TELLSTR. 29 70806 KORNWESTHEIM, GERMANY
Staatsangehörigkeit GERMAN	Citizenship GERMAN
Postanschrift TELLSTR. 29 70806 KORNWESTHEIM, GERMANY	Post Office Address TELLSTR. 29 70806 KORNWESTHEIM, GERMANY
Vor- und Zuname des drittens Erfinders (falls zutreffend) Juergen SEIZ	Full name of third joint inventor, if any Juergen SEIZ

Unterschrift des Erfinders 	Datum 31/01/00	Third inventor's signature 	Date 31/01/00
Wohnsitz BAUMBLUETE 11 73642 WELZHEIM, GERMANY		Residence BAUMBLUETE 11 73642 WELZHEIM, GERMANY	
Staatsangehörigkeit GERMAN		Citizenship GERMAN	
Postanschrift BAUMBLUETE 11 73642 WELZHEIM, GERMANY		Post Office Address BAUMBLUETE 11 73642 WELZHEIM, GERMANY	
Vor- und Zuname des viertens Erfinders (falls zutreffend) HEINZ EISENSCHMID		Full name of fourth joint inventor, if any HEINZ EISENSCHMID	
Unterschrift des Erfinders 	Datum 4.2.2000	Fourth inventor's signature 	Date 2000/2/4
Wohnsitz LUDWIGSHAFENER STR. 7 70499, STUTTGART, GERMANY		Residence LUDWIGSHAFENER STR. 7 70499 STUTTGART, GERMANY	
Staatsangehörigkeit GERMAN		Citizenship GERMAN	
Postanschrift LUDWIGSHAFENER STR. 7 70499, STUTTGART, GERMANY		Post Office Address LUDWIGSHAFENER STR. 7 70499, STUTTGART, GERMANY	
Vor- und Zuname des fünftens Erfinders (falls zutreffend) Achim DIETERICH		Full name of fifth joint inventor, if any ACHIM DIETERICH	
Unterschrift des Erfinders 	Datum 31.01.00	Fifth inventor's signature 	Date 31.01.00
Wohnsitz SPIELHOF 25 71540 MURRHARDT, GERMANY		Residence SPIELHOF 25 71540 MURRHARDT, GERMANY	
Staatsangehörigkeit GERMAN		Citizenship GERMAN	
Postanschrift SPIELHOF 25 71540 MURRHARDT, GERMANY		Post Office Address SPIELHOF 25 71540 MURRHARDT, GERMANY	
Vor- und Zuname des sextens Erfinders (falls zutreffend) ANDREAS KUGLER		Full name of sixth joint inventor, if any ANDREAS KUGLER	

Unterschrift des Erfinders 	Datum 31. 1. 00	Sixth inventor's signature 	Date 31. 01. 00
Wohnsitz TECKSTR. 13 73553 ALFDORF, GERMANY		Residence TECKSTR. 13 73553 ALFDORF, GERMANY	
Staatsangehörigkeit GERMAN		Citizenship GERMAN	
Postanschrift TECKSTR. 13 73553 ALFDORF, GERMANY		Post Office Address TECKSTR. 13 73553 ALFDORF, GERMANY	
Vor- und Zunamen des siebten Erfinders (falls zutreffend)		Full name of seventh joint inventor, if any	
Unterschrift des Erfinders	Datum	Seventh inventor's signature	Date
Staatsangehörigkeit		Citizenship	
Postanschrift		Post Office Address	
Vor- und Zunamen des achtens Erfinders (falls zutreffend)		Full name of eighth joint inventor, if any	
Unterschrift des Erfinders	Datum	Eighth inventor's signature	Date
Wohnsitz Ringstrasse 8, 74391 Erligheim, Germany		Residence Ringstrasse 8, 74391 Erligheim, Germany	
Staatsangehörigkeit DE		Citizenship DE	
Postanschrift Ringstrasse 8, 74391 Erligheim, Germany		Post Office Address Ringstrasse 8, 74391 Erligheim, Germany	